

ENVIRONMENTAL ASSESSMENT
DRAFT

HARDWARE RANCH
LAND EXCHANGE

**Involving Lands Owned by the
Utah Division of Wildlife Resources
and Dee's Corporation, Inc.**

CACHE COUNTY, UTAH

Decision Relating to
FEDERAL ASSISTANCE GRANT W-12-L

December 7, 2006

Prepared by the
Utah Division of Wildlife Resources
for the
U.S. Fish and Wildlife Service -- Division of Federal Assistance
Region 6
Denver, CO

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PURPOSE AND NEED

The Hardware Ranch Wildlife Management Area (Hardware Ranch) was purchased by the Utah Division of Wildlife Resources (Division) under a series of grants awarded by the U.S. Fish and Wildlife Service (Service), acting under provisions of the Federal Aid in Wildlife Restoration Act of 1937 (Wildlife Restoration Act). Parcels of Hardware Ranch are currently interspersed among those of Dee's Corporation, Inc. while some of Dee's Corporation parcels are surrounded by Division land, resulting in irregular and sometimes discontinuous boundaries. In some instances properties of one owner are surrounded entirely by the other landowner's property. As a result, hunters and other recreationists using the Hardware Ranch area often find it difficult to determine the locations of property lines and may unintentionally enter private property. The complicated boundaries also make it more difficult for the Division and Dee's Corporation to access portions of their own lands for routine operations and maintenance tasks. Additionally, Dee's Corporation plans to fence much of its property, which would further inhibit the ability for the public and the Division to access isolated portions of Hardware Ranch.

In order to reduce these problems, increase access to Hardware Ranch for the public, and enable Dee's Corporation and the Division to more easily manage their properties and reduce associated costs, the two landowners have proposed to exchange certain parcels that would result in a continuous property boundary.

Because Hardware Ranch parcels were purchased with federal grant funds under the Wildlife Restoration Act, the exchange of such lands requires approval from the Service. The approval of disposal of lands that are federal assets requires the Service to analyze this action and its potential impacts to the environment under the National Environmental Policy Act of 1969, as amended, and to allow the public an opportunity to review and comment on the Service's findings. The Service will use the analysis to determine if the action may result in significant impacts to the environment. If determined that none are likely, the Service will issue a finding of no significant impact. If significant impacts may occur, the Service would be required to prepare an environmental impact statement.

Background

Hardware Ranch is located in southeastern Cache County, Utah (Fig. 1). It is situated south of U.S. Forest Service land and north of mostly private property. Hardware Ranch begins approximately 13 miles east of the town of Hyrum, near the eastern extent of State Road 101 which runs through portions of the wildlife management area.

Hardware Ranch acquisition began in 1945 using a grant made possible through the Wildlife Restoration Act. Hardware Ranch has been open to the public since the winter of 1946-1947. Through incremental purchases made over the years with federal funds and matching state funds or land donations, Hardware Ranch has grown to 13,707.7 acres and is one of the most highly visited wildlife management areas in the state.

Hardware Ranch was originally established for the purpose of providing a wintering area and supplemental feeding location for elk (*Cervus elaphus*) inhabiting Blacksmith Fork Canyon in order to reduce elk depredation on farmlands in southern Cache Valley. Other purposes of the wildlife management area now include providing year-round habitat for big game, upland game, and non-game species, and offering recreational and educational opportunities to meet increasing public demands for open space, hunting areas, and outdoor recreational settings.

Wildlife viewing is a popular activity at Hardware Ranch, especially during winter when elk-feeding operations are underway. The public has the chance to observe a wild elk herd that sometimes nears 700 animals. The Division runs a visitor center and café, and offers horse-drawn sleigh rides which let visitors view elk in close proximity to the sleighs. These services have increased the number of visitors to as many as 51,000 people in a single winter season.

The Division is now attempting to establish year-round programs at Hardware Ranch, focusing on increased wildlife education and outreach, improved recreational opportunities including hunting and fishing, and habitat projects. About 92 percent of Hardware Ranch's operational budget is derived from the sale of state hunting and fishing licenses, so these activities are promoted at Hardware Ranch. With the advent of year-round programs for the public, it becomes increasingly important to clarify boundaries, trails, and access associated with Hardware Ranch.

Incremental acquisition of additional lands for Hardware Ranch over the past 60 years led to irregular boundaries, as well as occasional inholdings. Although expansion of Hardware Ranch provided overall benefits to wildlife, the more complex boundary system has made it increasingly difficult for the Division to manage their lands and reduce unintentional entry by hunters onto adjacent properties.

Dee's Corporation became a major landowner in the Hardware Ranch area following their purchase in 2005 of several thousand acres in Blacksmith Fork Canyon and adjoining drainages. Business activities on Dee's property, often referred to as Coldwater Ranch, include cattle ranching and providing commercial hunting opportunities. About 80 acres of property owned by Dee's Corporation are surrounded by Hardware Ranch lands, and approximately 280 acres of Hardware Ranch parcels are landlocked within Dee's Corporation lands (Fig. 2).

ALTERNATIVES

Alternative A: Exchange of Inholdings and Irregular Boundary Parcels (Preferred Alternative)

Under this alternative, the Division and Dee's Corporation would exchange a total of 1,648.41 acres of landlocked and isolated border properties (Fig. 3). The Division would receive 810.85 acres while Dee's Corporation would receive approximately 837.56 acres. This exchange would generally follow the upper ridgeline bounding the south side of the Blacksmith Fork drainage.

The Division would release properties in Sections 19, 20, 21, and 30 of Township 10N, Range 3E to Dee's Corporation. In exchange, Dee's Corporation would release parcels in Sections 17 through 23 of Township 10N, Range 3E to the Division.

The appraised value of the property Dee's Corporation would exchange is \$672 per acre, with a total appraisal of \$544,891.20. The property the Division proposes to exchange is valued at \$668 per acre, with a total appraisal of \$559,550.20. The discrepancy in acreage (26.8 acres) and value (\$13,400.00) would be resolved through a payment of \$13,400.00 by Dee's Corporation to the Division at closing. The Division would then credit that amount back to Wildlife Restoration Act grant accounts to be reinvested in grant projects for wildlife in Utah with approval from the Service's Division of Federal Assistance.

Dee's Corporation would fence much of its boundaries after the exchange.

Alternative B: Exchange of Primarily Inholdings

This alternative differs from Alternative A in that the Division and Dee's Corporation would exchange just their properties that are entirely or mostly landlocked (Fig. 4). The Division would dispose of 285 acres in sections 18, 20, and 21 of Township 10N, Range 3E. Dee's Corporation would dispose of 120 acres located in sections 18 and 21 of Township 10N, Range 3E. At the same dollar per acre rate as in Alternative A, the value of the property the Division would exchange is \$190,380 and the value of the property Dee's Corporation would exchange is \$80,640. The Wildlife Restoration Act regulations would require that the \$109,740 difference in value be credited back to the grants account for future reinvestment in grant projects for wildlife in Utah with approval from the Service's Division of Federal Assistance.

Dee's Corporation would fence much of its boundaries after the exchange.

Alternative C: No Action

Under this alternative, the Division and Dee's Corporation would not exchange any lands or property rights. Dee's Corporation would fence much of its current boundaries with Hardware Ranch.

Other Alternatives Considered but Dismissed from Further Analysis

Two other alternatives were considered but dismissed from additional analysis because they do not meet the purposes of the proposed project or are infeasible. One such alternative was full purchase of Dee's Corporation parcels proposed for exchange in Alternative A without disposing of any Hardware Ranch property. This alternative is not feasible due to the Division's lack of foreseeable funding to purchase those parcels. Furthermore, this alternative would not eliminate significant border irregularities or isolated inholdings within Dee's property.

Another alternative considered was to purchase a conservation easement on the parcels Dee's Corporation otherwise would have offered in exchange. This alternative is not feasible because Dee's Corporation has no interest in granting a conservation easement, which they have

determined would restrict management of their private properties to an unacceptable degree. As with full purchase, this alternative would not eliminate significant border irregularities. Consequently, it would not fully address the needs.

AFFECTED ENVIRONMENT

The elevation of the geographic area ranges from 5200 to 7600 feet. The legal description of the Division's ownership within Township 10N, Range 3E (in which the entirety of the exchange is proposed under all described alternatives) is described in Appendix A. There are no national parks, refuges, wilderness areas, wild or scenic rivers, national natural landmarks, sole or principal drinking water aquifers, or national monuments on Hardware Ranch or Dee's Corporation property.

A few access roads occur on Hardware Ranch including one that is parallel to the area to be exchanged: Ant Flat Road runs south from Hardware Ranch to State Road 39. Two miles of Ant Flat Road in Cache County are located within Hardware Ranch and the remaining 12.5 miles continue south in Weber County through Dee's Corporation land and other public and private properties.

No easements or encumbrances occur on any properties involved in the proposed exchanges. Fences occur along portions of the Hardware Ranch boundaries and near riparian corridors. The border fencing serves to separate grazing areas on U.S. Forest Service, private, and Hardware Ranch ownership. Fencing along the riparian corridors serves to discourage off-road vehicle use, unauthorized ("trespass") grazing, and heavy pedestrian traffic, which may damage riparian vegetation, cause soil erosion and sedimentation in streams.

Physical Resources

Soils

Soils that occur on Dee's Corporation and Hardware Ranch parcels include Yeates Hollow Extremely Rocky Silt Loam (UDWR 2001) and other soils of the Yeates Hollow-Ant Flat-Cooring Association. These soil types occur mostly east of Rock Creek and southward from Blacksmith Fork River. This area consists of 30 to 60 percent slopes and soils of silt-loam, silt-clay, clay, and cobble-clay subsoils. These soils exhibit poor permeability and rapid runoff. Rocky outcrops are present throughout the soil layer. Natural erosion takes place because of the slope, soil conditions, and precipitation found in the area.

Water

Three recognizable drainages occur on Hardware Ranch: Curtis Creek, Rock Creek, and Blacksmith Fork River. Curtis and Rock creeks are tributaries to the Blacksmith Fork River. Dee's Corporation property occurs in the Blacksmith Fork drainage but does not include Curtis Creek or Rock Creek. Some sedimentation occurs in these drainages because of soil erosion in part caused by off-highway vehicles, localized effects of livestock trailing, and site-specific pedestrian traffic in riparian areas. These problems have been corrected somewhat with fencing installed to better manage heavy foot-traffic and other uses associated with streams.

The Blacksmith Fork River runs near and parallel to a parcel in Section 23 that Dee's Corporation proposes to exchange in Alternative A (Fig. 3). No frontage on a stream would be exchanged under any alternative.

There are numerous springs and small washes on the Dee's Corporation and Hardware Ranch properties slated for exchange. Other ephemeral washes occur elsewhere on Dee's Corporation and Hardware Ranch lands that are not part of the proposed exchange areas. None of the exchange properties include aquatic habitats, direct stream frontage, or other surface waters connected to the river or creeks. Dee's Corporation and the Division would retain ownership of water rights to springs located on properties involved in the exchange. Hardware Ranch currently has 35 water rights on the surface water sources, which are used for domestic purposes, hay production, stock watering, and the visitor center and café.

Biological Resources

Vegetation

Twelve different vegetation, or land cover, types (USGS 2004) occur on the proposed exchange parcels. These vegetation types include: mountain fir, aspen, maple, sagebrush/perennial grasses, mountain fir/mountain shrub, mountain riparian, dry meadow, juniper, maple, mahogany, grassland, and pinyon/juniper. Livestock grazing has taken place on both Hardware Ranch and Dee's Corporation property although only minor localized effects (such as erosion near stream or trail crossings) of livestock presence are apparent across the landscape.

The Division performed a range-trend study in 2001 in Township 10N, Range 3E, Section 24 on Hardware Ranch near the Dee's Corporation parcel located just east of the Blacksmith Fork River in Section 23. The sample area in the range trend study is representative of the type of vegetation that would be found throughout the majority of the lands to be exchanged. The sample area consisted of 31 percent cover of grasses. Common grasses found in the study area were bluebunch wheatgrass (*Agropyron spicatum*), cheatgrass (*Bromus tectorum*), and curly bluegrass (*Poa secunda*).

Forbs made up approximately 16 percent of the ground cover in the sample area. The main forb species found were common yarrow (*Achillea millefolium*), white sagebrush (*Artemisia ludoviciana*), arrowleaf balsamroot (*Balsamorhiza sagittata*), nodding thistle (*Cirsium undulatum*), pin clover (*Erodium cicutarium*), and jagged chickweed (*Holosteum umbellatum*).

Browse species, such as mountain big sagebrush (*Artemisia tridentata vaseyana*), sticky-leaf rabbitbrush (*Chrysothamnus viscidiflorus viscidiflorus*), antelope bitterbrush (*Purshia tridentata*), and mountain snowberry (*Symphoricarpos oreophilus*) made up about 6 percent of the ground cover in the sample area. The rest consisted of rock, litter, and bare ground.

There is also one record in the general area of the Hopkin's tower mustard (*Arabis glabra* var. *furcatipilis*), a U.S. Forest Service Recommended Sensitive Species, but it is not known to occur on any of the proposed exchange parcels.

Cheatgrass is an invasive non-native species from Eurasia, and is detrimental to native rangeland ecology because it outcompetes many native perennial grasses. It also dramatically increases fire frequencies which it is much better adapted to survive than native grasses are. It offers minimal wildlife value and is useful to livestock only during a brief period in the spring. In the sample area, cheatgrass declined from 10 percent of the ground cover in the 1996 survey to 6 percent in 2001. Spring livestock grazing was used to reduce this annual grass and the competition effects it has on natural vegetation and ecosystem functions.

Noxious weeds other than cheatgrass may be present on the lands to be exchanged. Canada thistle (*Cirsium arvense*), leafy spurge (*Euphorbia esula*), and Dyer's woad (*Isatis tinctoria*) occur sporadically in some of the habitats on the exchange parcels. An appropriate herbicide is applied annually, according to label directions by certified applicators, to suppress these noxious weeds on Hardware Ranch lands.

Federally Listed Species

Two species listed under the Endangered Species Act of 1973 occur in Cache County, Utah: the threatened Maguire primrose (*Primula maguirei*) and threatened bald eagle (*Haliaeetus leucocephalus*).

Maguire primrose is a very rare species found only in one canyon system in Utah. It is restricted to cool, moss-covered dolomite cliffs and boulders in the lower elevations of Logan Canyon. This species may be dependent on the calcium and magnesium carbonates of its soil substrate (USFWS 1990). Hardware Ranch and Dee's properties lie approximately 20 miles south of this area. The specialized habitat of this species is not known to occur on these properties. Therefore, it is unlikely that this species occurs on any of the parcels involved in the exchange.

The threatened bald eagle (*Haliaeetus leucocephalus*) has only eight known nests in Utah, none of which occur within the vicinity of Hardware Ranch or Dee's properties (UDWR 2005). Bald eagle nests are generally located in tall trees and commonly found near bodies of water where their typical prey (fish and waterfowl) are available. During non-breeding periods, especially winter, bald eagles are relatively social and roost communally in sheltered stands of trees. Wintering areas are commonly associated with open water, though other habitats may be used if food resources such as rabbit or deer carrion are readily available.

In Cache County, bald eagle winter roosting sites occur along Bear River and small reservoirs (UDWR 2005), including Hyrum Reservoir located approximately 9 miles west of the proposed exchange parcels. Division staff visited lower elevation areas adjacent to the proposed exchange parcels by vehicle and on foot during summer and winter seasons from 2003 through 2006 as part of other survey duties. These surveys produced six records of bald eagles within 1.5 miles of the proposed exchange properties, but none were observed on them. Use of the area surrounding the proposed exchange parcels by bald eagles is relatively common. Bald eagles may visit the proposed exchange parcels in search of carrion, but are unlikely to roost or nest on them because the exchange parcels lack suitable bald eagle roosting or nesting sites.

Other Wildlife Species

Species on the Utah Sensitive Species List that are known to occur on or very near the exchange areas are the greater sage-grouse (*Centrocercus urophasianus*), western toad (*Bufo boreas*), and Bonneville cutthroat trout (*Oncorhynchus clarkii utah*). These species were also identified as Species of Greatest Conservation Need in the Utah Comprehensive Wildlife Strategy (UDWR 2005a). Other species with records of occurrences in the vicinity of the proposed exchange parcels that were identified as Utah Species of Greatest Conservation Need include osprey (*Pandion halieatus*), Piute sculpin (*Cottus beldingi*), rubber boa (*Charina bottae*), and northern leopard frog (*Rana pipiens*) (UDWR 2005a; UDWR 2005b).

The Hardware Ranch and Dee's Corporation's Coldwater Ranch support many other wildlife species including carnivores, such as the raccoon (*Procyon lotor*), bobcat (*Lynx rufus*), cougar (*Felis concolor*), black bear (*Ursus americanus*), and coyote (*Canis latrans*) and herbivorous and insectivorous species, such as the big brown bat (*Eptesicus fuscus*), brush mouse (*Peromyscus boylii*), and montane vole (*Microtus montanus*). A variety of upland game species are present on both properties: the chukar partridge (*Alectoris chukar*), jack rabbit (*Lepus townsendii*), ruffed grouse (*Bonasa umbellus*), and mountain cottontail (*Sylvilagus nuttallii*). Waterfowl, such as mallards (*Anas platyrhynchos*), can be observed in the riparian areas of Hardware Ranch and Dee's Corporation properties most of the year. A wide variety of Neotropical migratory birds use riparian habitats and forested landscapes found throughout the two ranches. Golden eagles (*Aquila chrysaetos*) also frequent the surrounding area.

Elk (*Cervus elaphus*), mule deer (*Odocoileus hemionus*), and moose (*Alces alces*) use both Hardware Ranch and Dee's Corporation properties. The proposed exchange areas in each alternative include crucial winter and summer habitats for all three species. A pellet transect study done in 2001 at the site of the range trend survey estimated that there were 39 mule deer days use per acre and 13 elk days use per acre (UDWR 2001).

Approximately 500 to 1000 mule deer use the wildlife management area on south-facing slopes during the winter season, and migrate to higher elevation summer ranges as the weather warms. Deer population sizes are more difficult to estimate during summer, given their dispersion and the difficulty of surveying numbers in dense montane forests where deer spend their summers.

Use of the wildlife management area by elk during fall and winter is high. The heaviest use by elk occurs on the range immediately next to the feeding area on Hardware Ranch, located in a flat grassy meadow well over a half mile east-northeast of the proposed exchange lands. From late September to roughly the beginning of December, approximately 200 to 300 elk use the wildlife management area. From early December to mid-March, the numbers typically increase to about 400 to 600 elk, depending on the weather and elk population status. Elk, like mule deer, use higher elevation areas during the summer.

An estimated 10 to 20 moose use the wildlife management area each winter, and can be found mainly in the riparian corridors. During the summer, moose move to higher elevations in the adjacent areas.

Sport Fisheries

The Division developed a system to classify rivers, streams, and other water bodies according to criteria based on aesthetics, natural character, productivity, biological function, and public accessibility. Class 1 is the highest level. Blacksmith Fork River is a Class 1 fishery and also supports a number of species, such as the brown trout (*Salmo trutta*), cutthroat trout (*Oncorhynchus clarki*), rainbow trout (*Oncorhynchus mykiss*), and mountain whitefish (*Prosopium williamsoni*). Curtis Creek and Rock Creek are categorized as Class 3 fisheries, supporting various trout species.

Historic and Cultural Resources

Montgomery Archaeological Consultants performed an archaeological survey of the parcels involved in the proposed exchange, and no historic or cultural resources were found.

Recreation

The Hardware Ranch Wildlife Management Area is managed for multiple uses, with many different recreational activities occurring on the property. These activities include hunting, fishing, wildlife viewing, hiking, wildlife-viewing by sleigh, cross-country skiing, snowmobile and off-highway vehicle (OHV) use, mountain biking, horseback riding, and camping.

Utah State Parks and Recreation is responsible for grooming and upkeep of the snowmobile and OHV trails crossing Hardware Ranch. Thousands of riders use these trails and those connecting to the wildlife management area each year. Organized recreational trails confine much of the activity which might otherwise occur over a wider area, disturbing wildlife or causing chronic resource damage in more sensitive areas.

Sportsmen use much of the wildlife management area for upland game and big game hunting. A small number of skilled hunters are able to negotiate the confusing boundaries to access a desirable hunting spot, which is a sheltered bowl in part of Section 19 slated for exchange. Fishing, particularly for trout, is also a popular recreational activity on the Blacksmith Fork River and its two tributaries within Hardware Ranch.

Dee's Corporation property is closed to the general public. Dee's Corporation regulates any recreational activities which occur on their property. None of the developed motorized recreation trails managed by Utah State Parks and Recreation contact Dee's Corporation property.

Social and Economic Factors

The lands in the proposed exchange area occur approximately 13 miles from the nearest human population center in the Cache Valley. With a population approaching 135,000, the county economy consists of a mix of light manufacturing, agriculture, specialized scientific research and production, and university and college facilities. The area involved in the exchange proposal is classified by the Cache County Council as recreational property, well suited as open land supporting outdoor recreation and rangeland uses.

ENVIRONMENTAL CONSEQUENCES

Alternative A: Exchange of Inholdings and Irregular Boundary Parcels (Preferred Alternative)

Major changes in land uses are not expected to occur on the parcels to be exchanged as proposed in this alternative. Both owners currently allow livestock grazing. The Division employs livestock grazing as a tool in achieving desired vegetation conditions to benefit wildlife and watershed function. Therefore grazing is expected to continue on Hardware Ranch when vegetation conditions warrant it. Dee's operates their livestock program in part as a business venture, along with their commercial hunting operation. Those operations are managed concurrently so that both are sustainable actions which promote rangeland health and optimum wildlife populations. It is reasonable to expect this management pattern to continue, because it supports Dee's Corporation's long-term interests. Because the proposed exchange involves lands of similar acreage, habitats, and conditions, the switch of the parties' grazing activities on the exchanged lands is not likely to result in any substantial effects to the physical or biological resources.

Increased hunting and other recreational activities may occur on lands that were previously owned by Dee's Corporation, while such activities may diminish on those parcels which the Division would exchange with Dee's Corporation. Therefore, the types and levels of recreational activities in the area are not likely to change significantly as a result of the exchange. Because there are no significant differences in the environmental resources occurring on all the parcels to be exchanged, the shift in location of recreational activities would not be expected to result in any significant impacts to soil, water, wildlife, or range conditions on these lands.

The quality of hunting and the recreational experiences enjoyed by the public on Hardware Ranch after the exchange is expected to improve through elimination of confusing boundaries. Hunters and other recreationists would be able to move more easily on Hardware Ranch without inadvertently entering private lands. They also would be able to enjoy more of Hardware Ranch with a definitive knowledge of their own location.

One area of Hardware Ranch proposed for disposal, specifically the sheltered bowl contained in part of Section 19, now benefits a comparatively few skilled hunters who can access the isolated tracts with confidence in traveling among ownerships. Once the exchange takes place under this alternative, the small number of hunters who are able to find their way to the isolated desirable hunting spot in Section 19 will no longer be able to hunt this spot. However, the purpose of the proposed exchange is to improve the quality of the hunting experience for the general hunting public who use Hardware Ranch by eliminating confusing boundaries. Although the reduction in hunting opportunities from the loss of this small area to a few hunters is unfortunate, it is small in comparison to the overall benefits that the proposed exchange would confer to the much greater number of public hunters who use the rest of Hardware Ranch. Furthermore, the loss of the hunting area in Section 19, may be offset by the gain of similar high-quality spots from the exchange. The west side of Section 20, for instance, contains another cirque-like protected basin which offers desirable hunting lands likely to hold elk. In addition, this alternative would make use of a drainage divide to help demarcate the new boundary.

Because Dee's Corporation plans to fence much of their boundaries under any alternative, this alternative would avoid a situation where access to inholdings by the Division would become even more difficult or impossible. Therefore, the land exchange proposed under this alternative may result in benefits to biological, water, and soil resources on Hardware Ranch, because both public and administrative access would be improved, cutting down on undesired public travel and allowing the Division better opportunities for management and maintenance of their own lands.

Because potential use by the federally listed bald eagle of the proposed exchange lands is not tied to any particular parcel, the exchange and subsequent shift in activities is not likely to affect this species. As stated earlier, the federally listed Maguire primrose is not likely to occur on the two properties, and, therefore, would not be affected by this alternative.

Because there are no cultural or historical resources on the parcels to be exchanged, no effects to such resources are expected to occur. The Utah State Historic Preservation Officer concurred with the Division's determination of no effect on historic or cultural resources from the exchange of properties (Appendix B).

Because this exchange is not likely to result in substantial changes in the type or level of human activities in the area, Alternative A is not likely to result in any identifiable effects to the social or economic conditions in the area.

This alternative is preferred by all involved parties because it would eliminate inholdings within both Hardware Ranch and Dee's Corporation land. It would also reduce extreme irregularities in the boundary between the two properties. Although Hardware Ranch would undergo a net loss of about 27 acres in this exchange, the ultimate benefits to biological and physical resources and the public through improved access and management would offset this loss. Furthermore, Wildlife Restoration Act grant funds would be compensated for the value of those acres and the money would be available for land acquisition or other projects to benefit wildlife in Utah.

Alternative B: Exchange of Primarily Inholdings

On the whole, the analysis of effects for physical, biological, and cultural resources, and social and economic factors described for Alternative A applies to the lands proposed for exchange in Alternative B. However, in this alternative some extreme boundary irregularities would remain and some portions of Dee's Corporation land would remain disjunct. Furthermore, Hardware Ranch would see a net loss of 165 acres. Although, this alternative would eliminate much of the confusing boundaries for the public using Hardware Ranch the loss of 165 acres could result in a significant diminishment of hunting and other recreational opportunities on Hardware Ranch.

This alternative is not preferred because the net loss to Hardware Ranch of 165 acres is not likely to offset the benefits to wildlife and the public derived from the exchange.

Alternative C: No Action

Once Dee's Corporation installs fencing along its property boundaries, the Division and Dee's Corporation would find it even more difficult to access and manage their inholdings under this alternative. Biological, soil, and water resources on those inholdings would not likely experience significant change, but if particular problems arise, such as spread of noxious weeds, habitat quality on lands belonging to each landowner could diminish because access for management and monitoring would be hindered.

Confusion on the part of hunters and other recreational users regarding location of property lines would remain and access to inholdings and disjunct parcels would be prevented by fencing, thereby diminishing hunting and recreational opportunities and quality.

For the reasons described above and because this alternative would not address the identified need, it is not preferred.

Cumulative Impacts

A cumulative impact on the environment results from incremental effects of present actions when considered in light of past, present, or reasonably foreseeable future actions, regardless of who implements them. Cumulative impacts can result from individually minor but collectively significant actions taking place over time. An important question in the current NEPA analysis is whether the present action is likely to result in an unintended but significant cumulative effect.

This proposed action is not likely to cause a significant, cumulative environmental effect because it generally would diminish potentially adverse environmental impacts, clarify and improve public access, and increase the ease of implementing resource management actions such as livestock movement or noxious weed control.

It is generally accepted that significant amounts of high quality, formerly open, privately owned hunting areas have been closed to the general public over the last 30 to 40 years across the West and even across the nation. This has resulted in cumulative losses in public access to prime hunting lands (W. James, Energy Development/NEPA Coordinator, UDWR, pers. comm., 2006). If Alternative C (the no-action alternative) is exercised, including fencing of properties planned by Dee's Corporation, this action would incrementally add to the cumulative loss of hunting lands accessible to the public.

Although exchanging the choice hunting spot in Section 9 would be a loss to the few hunters that are able to access it, this loss would not be cumulative because it would be offset by the availability of additional prime hunting areas through the exchange.

LITERATURE CITED

- USFWS. 1990. Maguire Primrose (*Primula maguirei*) Recovery Plan. U.S. Fish and Wildlife Service, Denver, Colorado. 13 pp.
- USGS. 2004. Provisional Digital Land Cover Map for the Southwestern United States. Version 1.0. United States Geological Survey. RS/GIS Laboratory, College of Natural Resources, Utah State University, Logan, Utah. <http://earth.gis.usu.edu/swgap/landcover.html>.
- UDWR. 2001. Range Trend Study 2001. Utah Division of Wildlife Resources, Provo, Utah. <http://www.wildlife.utah.gov/range/pdf/wmu02/02-13.pdf>.
- UDWR. 2005a. Utah Comprehensive Wildlife Conservation Strategy. Utah Division of Wildlife Resources, Salt Lake City, UT. 278 pp.
- UDWR. 2005b. Utah Division of Wildlife Resources Conservation Data Center. Utah Division of Wildlife Resources, Salt Lake City, UT. <http://dwrcdc.nr.utah.gov/ucdc/default.asp>.

Fig. 1. General location of Hardware Ranch in Cache County, northern Utah.

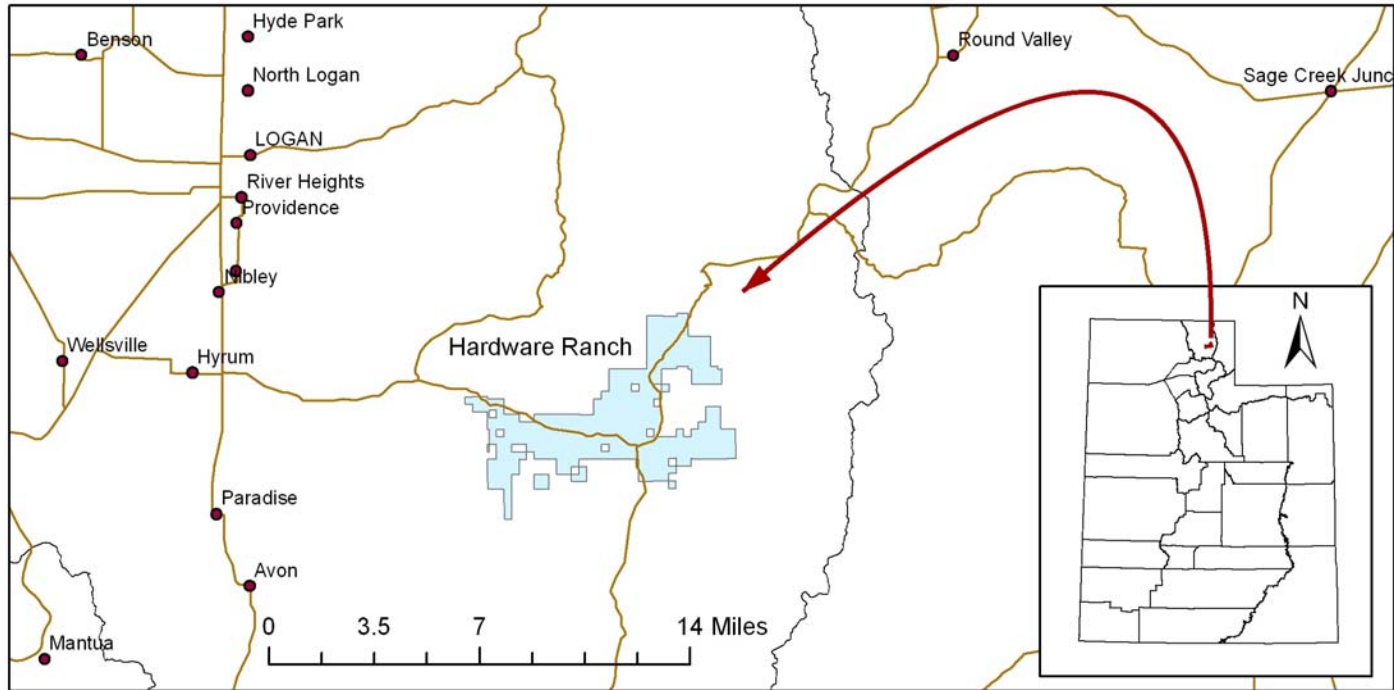


Fig. 2. Hardware Ranch WMA and the properties owned by Dee's Corporation, Inc., showing interspersion and boundary irregularity between the two ownerships.

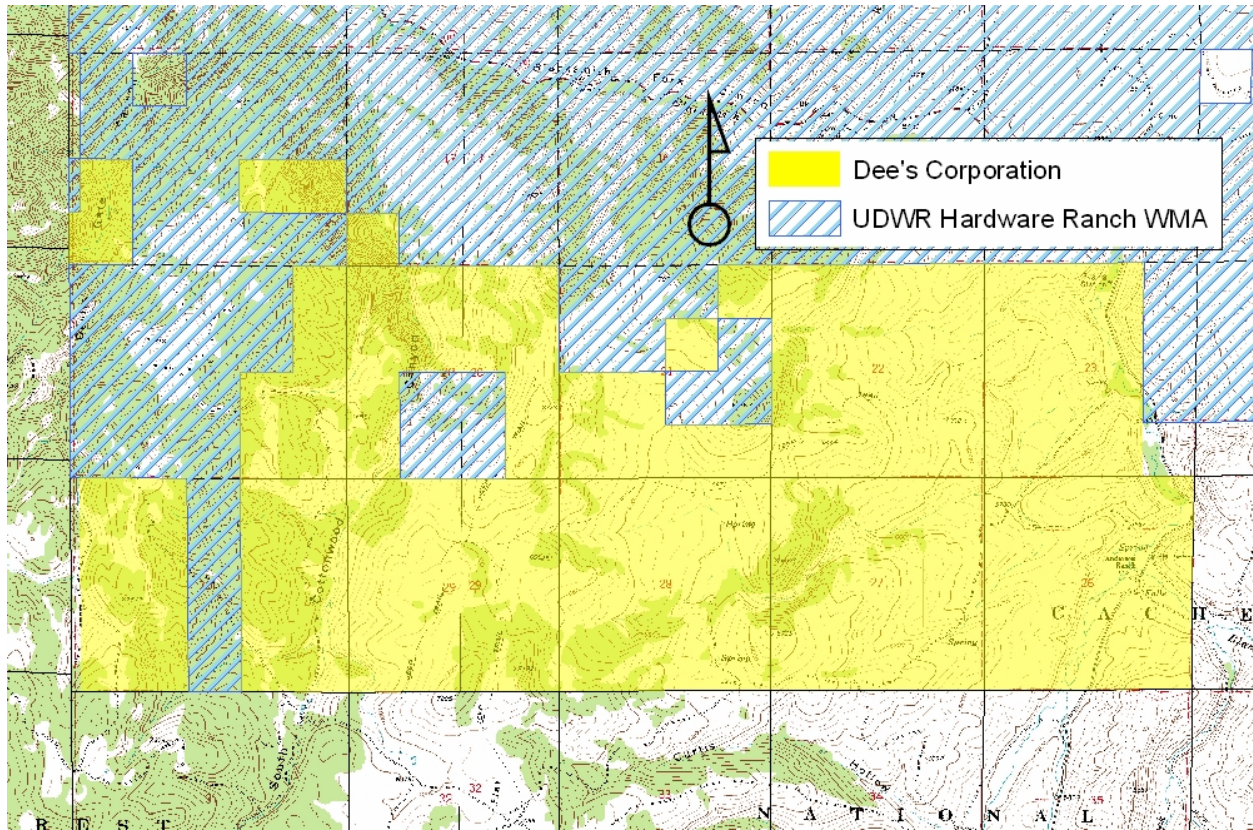


Fig. 3. Lands to be exchanged under Alternative A (preferred alternative)

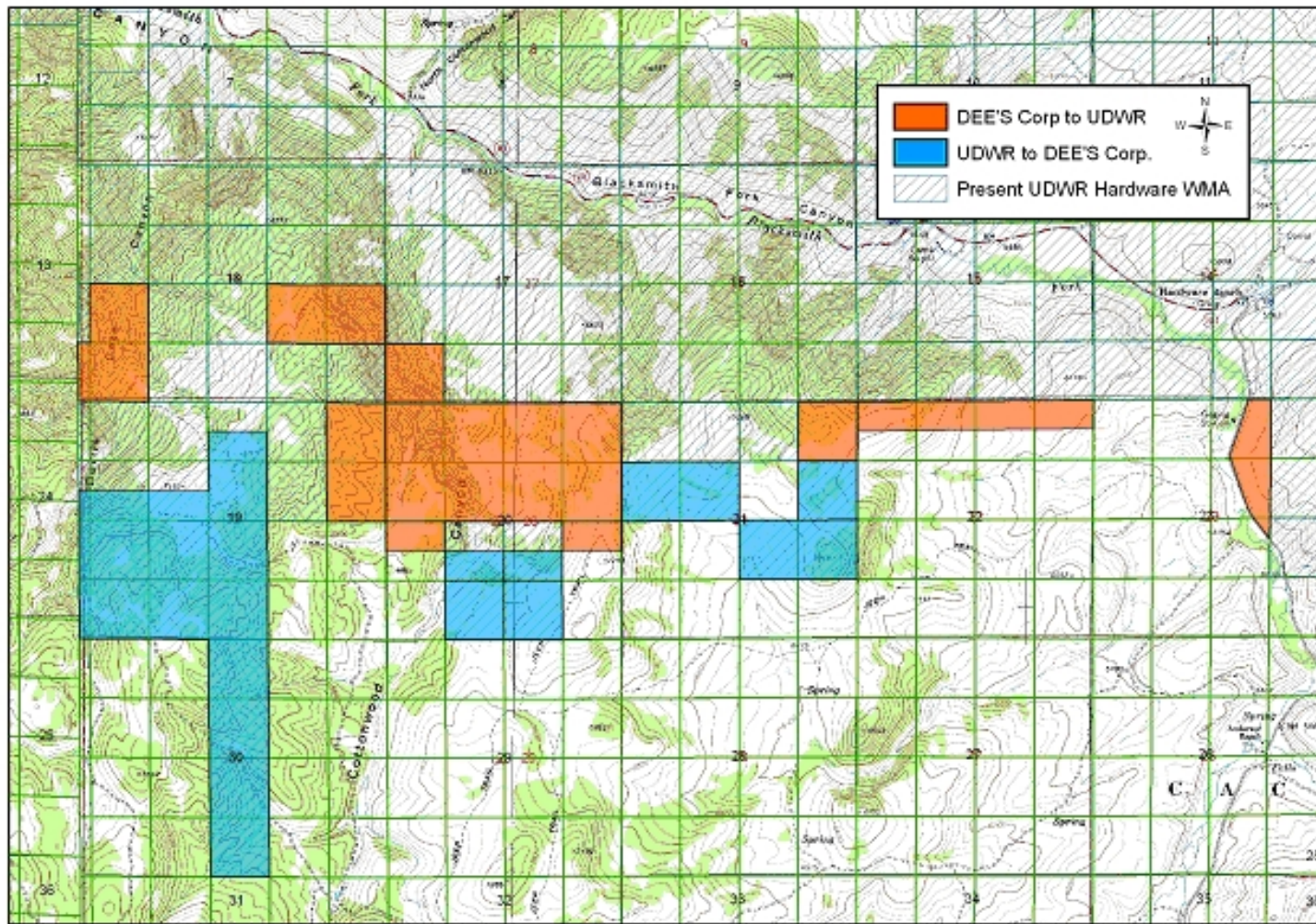
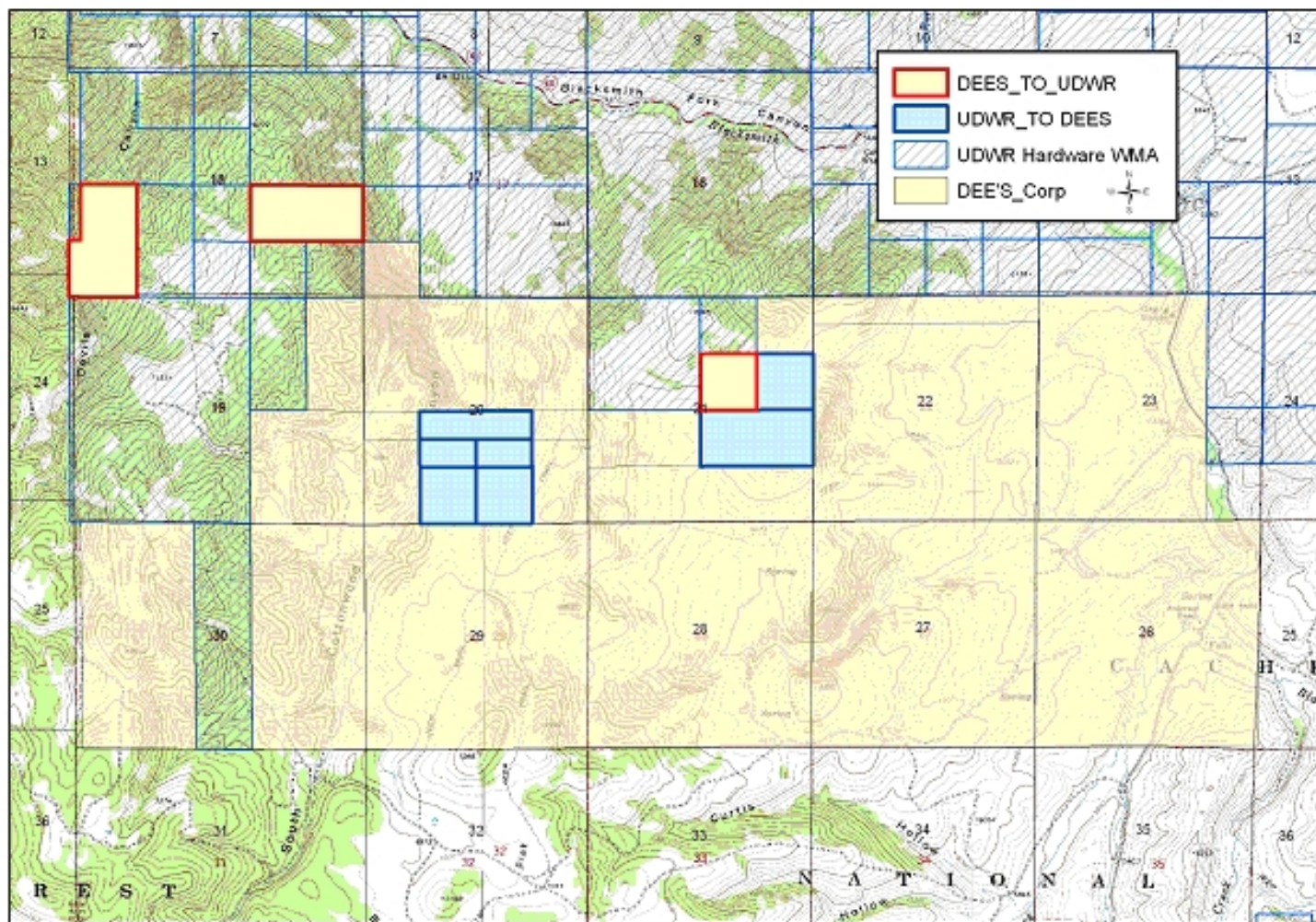


Fig. 4. Lands to be exchanged under Alternative B (primarily inholdings).



APPENDIX A

Legal Description of All Division Lands Proposed for Disposal under All Alternatives

Township 10 North Range 3 East, Salt Lake Base & Meridian:

1. The North Half of the SouthEast Quarter, and the SouthEast Quarter of the NorthEast Quarter of Section 21. Parcel comprises 120 acres, more or less.
2. The South Half of the NorthWest Quarter of Section 21. Parcel comprises 80 acres, more or less.
3. The SouthWest Quarter of the SouthEast Quarter, the SouthEast Quarter of the SouthWest Quarter, the South Half of the NorthEast Quarter of the SouthWest Quarter, and the South Half of the NorthWest Quarter of the SouthEast Quarter of Section 20. Parcel comprises 120 acres, more or less.
4. The SouthWest Quarter of Section 19, together with the South Half of the NorthWest Quarter, the SouthWest Quarter of the NorthEast Quarter and the South Half of the NorthWest Quarter of the NorthEast Quarter of Section 19, together with Lots 1, 8, 9 & 16 of Section 30. Parcel comprises 518 acres, more or less.

APPENDIX B

Utah State Historic Preservation Officer Letters of Concurrence on Cultural and Historical Resources



State of Utah

OLENE S. WALKER
Governor

GAYLE McKEACHNIE
Lieutenant Governor

Department of Community and Economic Development

DAVID HARMER
Executive Director

Division of State History / Utah State Historical Society

PHILIP F. NOTARIANNI
Division Director

December 1, 2004

Kathie A. Davies
Principal Investigator
Division of Wildlife Resources
1594 West North Temple, Suite 2110
P. O. Box 146301
Salt Lake City UT 84114-6301

RE: Project U-04-MQ-1117 - Hardware Ranch Land Exchange

In Reply Please Refer to Case No. 04-1401

Dear Ms. Davies:

The Utah State Historic Preservation Office received the above information on November 26, 2004. The report states that no cultural resources were located in the project area. We, therefore, concur with the report's recommendation of No Historic Properties Affected.

This information is provided on request to assist with state law responsibilities as specified in U.A.C. 9-8-404. If you have questions, please contact me at (801) 533-3555. My email address is: jdykman@utah.gov

As ever,
A handwritten signature in black ink, appearing to read "James L. Dykman".

James L. Dykman
Deputy State Historic
Preservation Officer - Archaeology

JLD:04-1401 OR/NPA

c: Keith R. Montgomery, Montgomery Archeological Consultants
P. O. Box 147, 322 East 100 South, Moab UT 84532



State of Utah

Department of
Natural Resources

ROBERT L. MORGAN
Executive Director

Division of
Wildlife Resources

MILES MORETTI
Acting Division Director

OLENE S. WALKER
Governor

GAYLE F. McKEACHNIE
Lieutenant Governor

COPY

November 22, 2004

Mr. Jim Dykmann
State History
300 Rio Grande
Salt Lake City, UT 84101

Dear Mr. Dykmann;

Enclosed for your review and comment is a report titled; *Cultural Resource Sample Inventory of the Hardware Ranch Land Exchange for the State of Utah Division of Wildlife Resources, Cache County, UT*. The Division of Wildlife Resources (Division) is in the process of conducting a land exchange in Cache County that would trade approximately 850 acres; some of which is completely land locked by private land owners, and some that is surrounded on three sides by private landowners. It has been proposed to exchange those landlocked parcels with equal portions of land that would be contiguous to our Hardware Ranch WMA that is located north of the land described in this report.

Montgomery Archaeological Consultants conducted an intuitive walking survey on 212 acres in October 2004. No cultural artifacts or features were identified during the survey. It is our recommendation that the land exchange be allowed to go forward without further survey.

Sincerely,

Kathie A. Davies
Principal Investigator

enclosure